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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,625	10/11/2001	Robert E. Haines	10007584-1	1659

7590 12/13/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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LETT, THOMAS J

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/976,625	<b>Applicant(s)</b> HAINES ET AL.	
	<b>Examiner</b> Thomas J. Lett	<b>Art Unit</b> 2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see Appeal Brief, filed 04 October 2006, with respect to claims 1-42 have been fully considered and are persuasive. The finality of claims 1-42 has been withdrawn with further explanation included in the claim rejections.
2. Applicant argues that there is no evidence of record that the mere providing of status information teaches determining that a status change has occurred in the peripheral device. On the contrary, the prior art of Sampath clearly discloses that the status information can be as simple as (1) on/off status of the monitored electronic system or (2) as highly specialized data which could, for example, pertain to itemization of components within the system which have actually failed, see at least col. 4, lines 55-66.
3. In addition, Applicants failed to uncover any teachings of Sampath that the status information is combined with anything let alone the specifically claimed combining of the status change with the unique device identifier. Examiner responds that in a networked monitoring/diagnostic system it is inherent and mandatory that the failing device combine its identifier with its problem status when reporting a problem status. Such a system would be very ineffective if the monitoring/diagnostic system did not know where the problem in such a networked system originated. Sampath et al monitors a plurality of devices and must receive the identifier and status information from the monitored device in order to rectify the problem device.

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4. Applicant states that Applicants have failed to uncover any teachings of feedback". Examiner respectfully directs Applicant to col. 3, lines 7-10.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 8-14 and 35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims call for "An article of manufacture comprising a computer usable medium having computer readable code embodied therein" should be changed to "A computer-readable medium encoded with computer-executable instructions" (see page 53 of the Interim Guidelines).
6. Claims 15-20, 36, 37 and 42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims call for "A computer implemented control system for a hardcopy output engine, the system comprising:" should be changed to "A computer-readable medium encoded with computer-executable instructions to control a system comprising..." (see page 53 of the Interim Guidelines).
7. Claims 1-7, 28-34, 39, 40 and 41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims are directed to a seemingly patentable process ("method") but seek patent protection for an abstract idea of computer-executable instructions as evident by claims 8-14 and 21-27. The claims describe functional descriptive material per se and have no practical application.

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Further, the method claim is "configured to" cause a processor to perform certain steps which does not necessarily execute its intended functionality.

8. Claims 21-27 and 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims call for "A computer instruction signal embodied in a carrier wave carrying instructions ...". Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101 (see page 55 of the Interim Guidelines).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 3-8, 10-15, 17-21, and 23-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Sampath et al (USPN 6,892,317 B1).

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With respect to claim 1, Sampath et al disclose a method of responding to a status change for a peripheral device comprising:

determining that a status change has occurred in the peripheral device (receiving status data from a monitored electronic system, col. 5, lines 61-64. The diagnostic system determines, from the status information received, whether a status change has occurred in the monitored printer. The monitored electronic peripheral is a printer, col. 6, lines 22-23.);

combining a unique device identifier relevant to the peripheral device with the status change to form an electronic message (in step 30, a necessary job identifier related to the monitored device is sent in order to repair the faulty device, col. 10, lines 28-30. The job identifier will inherently have a machine ID as well as a problem indicated on the job ticket in order for the servicing entity to know where and how to resolve the problem status) (further, in Step 48, the combining of (1) identification/instructions, (2) machine identification, and (3) repair identification (*which reads on a status change*) to be forwarded to the customer site, col. 10, lines 47-52); and

transmitting the electronic message across a firewall (the method may account for transmission through firewalls, col. 2, lines 27-33).

With respect to claim 3, Sampath et al disclose a method of claim 1, wherein determining comprises determining that an order toner condition exists in a hard copy output engine (see Table 1, col. 7, line 21).

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With respect to claim 4, Sampath et al a method of claim 1, wherein combining comprises combining the status change with a unique device identifier chosen from a group consisting of:

a predetermined account number associated with the peripheral device (in step 30, a necessary job identifier related to the monitored device is sent in order to repair the faulty device, col. 10, lines 28-30), a serial number associated with the peripheral device (the machine and repair identifiers are forwarded to a repair system, col. 10, lines 65-67).

With respect to claim 5, Sampath et al disclose a method of claim 1, wherein transmitting comprises transmitting an electronic message to a vendor of consumables and services relevant to the peripheral device (action request is forwarded to an appropriate vendor, a service provider, a vendor, a parts/consumables supplier, and/or to an autonomous repair agent, col. 2, lines 4-6).

With respect to claim 6, Sampath et al disclose a method of claim 1, wherein the peripheral device is chosen from a group consisting of: facsimile machines, photocopiers and printers (the monitored devices are networked electronic devices, e.g., printers, col. 2, lines 9-13. Fax and copier devices are also networked electronic devices.).

With respect to claim 7, Sampath et al disclose a method of claim 1, wherein determining that a status change has occurred comprises determining that a usage threshold (e.g., if printer data corresponds to a status of a threshold, this prediction information can be used to help avert a particular failure in the electronic system, col. 6,

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lines 22-26) indicative of need for preventive maintenance has been met (the prognostic device 450 predicts when repairs may be necessary and schedules maintenance using a repair planning circuit 450, col. 8, lines 3-12).

Claim 8, an article of manufacture claim, is rejected for the same reasoning as that of claim 1.

Claim 10, an article of manufacture claim, is rejected for the same reasoning as that of claim 3.

Claim 11, an article of manufacture claim, is rejected for the same reasoning as that of claim 4.

Claim 12, an article of manufacture claim, is rejected for the same reasoning as that of claim 5.

Claim 13, an article of manufacture claim, is rejected for the same reasoning as that of claim 6.

Claim 14, an article of manufacture claim, is rejected for the same reasoning as that of claim 7.

With respect to claim 15, Sampath et al disclose a computer implemented diagnostic system 10 configured to employ the software (col. 13, lines 20-33) to:

determine that a status change has occurred in the hard copy output engine (receiving status data from a monitored electronic system, col. 5, lines 61-64. The diagnostic system determines, from the status information received, whether a status change has occurred in the monitored printer. The monitored electronic peripheral is a printer, col. 6, lines 22-23.);



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combine a unique device identifier relevant to the hard copy output engine with the status change to form an electronic message (in step 30, a necessary job identifier related to the monitored device is sent in order to repair the faulty device, col. 10, lines 28-30) (further, in Step 48, the combining of (1) identification/instructions, (2) machine identification, and (3) repair identification (*which reads on a status change*) to be forwarded to the customer site, col. 10, lines 47-52); and

transmit the electronic message across a firewall (the method may account for transmission through firewalls, col. 2, lines 27-33).

Claim 17, computer implemented control system, is rejected for the same reasoning as that of claim 7.

Claim 18, computer implemented control system, is rejected for the same reasoning as that of claim 4.

Claim 19, computer implemented control system, is rejected for the same reasoning as that of claim 6.

Claim 20, computer implemented control system, is rejected for the same reasoning as that of claim 3.

Claim 21, computer signal claim, is rejected for the same reasoning as that of claim 1.

Claim 23, computer signal claim, is rejected for the same reasoning as that of claim 3.

Claim 24, computer signal claim, is rejected for the same reasoning as that of claim 4.

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Claim 25, computer signal claim, is rejected for the same reasoning as that of claim 5.

Claim 26, computer signal claim, is rejected for the same reasoning as that of claim 6.

Claim 27, computer signal claim, is rejected for the same reasoning as that of claim 7.

With respect to claim 28, Sampath et al disclose a method of claim combining using the peripheral device 1, wherein the combining comprises combining using the peripheral device (feedback diagnostic data is acquired from the monitored device (peripheral printer) col. 5, lines 61-62, and any other additional related device status information, col. 6, lines 10-13) Sampath et al further disclose that the system may operate in various configurations. Specifically, the diagnostic system and method may be built into the software or hardware of a workstation (col. 13, lines 28-33). Examiner notes that a workstation in the art may be a printer, copier, mfp, computer, or similar remote device. With such a configuration, the peripheral printer device would combine the information as claimed and send the information to a repair facility.

With respect to claim 29, Sampath et al disclose a method of claim 2 transmitting using the peripheral device, wherein the transmitting comprises transmitting using the peripheral device (feedback diagnostic data is acquired from the monitored device (peripheral), col. 5, lines 61-62 and any other additional related device status information, col. 6, lines 10-13). The diagnostic system and method may be incorporated into the software or hardware of a workstation (col. 13, lines 28-33).

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Examiner notes that a workstation in the art may be a hard copy output engine (printer, copier, mfp), computer, or similar remote/peripheral device.

With respect to claim 30, Sampath et al disclose a method of claim 29, wherein the transmitting comprises transmitting the electronic message comprising an order with respect to a consumable of the peripheral device (if a peripheral needs a consumable or service, the diagnostic server 100 routes an action request for service to the value added service provider 400 and an action request for a replacement part to the part consumable/supplier 500, col. 8, lines 35-38). The diagnostic system and method may be incorporated into the software or hardware (processing circuitry) of a workstation (**col. 13, lines 28-33**). Examiner notes that a workstation in the art may be a hard copy output engine (printer, copier, mfp), computer, or similar remote/peripheral device.

With respect to claim 31, Sampath et al disclose a method of claim 29, wherein the transmitting comprises transmitting the electronic message comprising an order with respect to maintenance of the peripheral device (if a peripheral needs a consumable or service, the diagnostic server 100 routes an action request for service to the value added service provider 400 and an action request for a replacement part to the part consumable/supplier 500, col. 8, lines 35-38).

With respect to claim 32, Sampath et al disclose a method of claim 1, wherein the combining and the transmitting comprise combining and transmitting using the peripheral device (feedback diagnostic data is acquired from the monitored device (peripheral), col. 5, lines 61-62 and any other additional related device status information, col. 6, lines 10-13). The diagnostic system and method may be

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incorporated into the software or hardware (*processing circuitry*) of a workstation (col. 13, lines 28-33). Examiner notes that a workstation in the art may be a hard copy output engine (printer, copier, mfp), computer, or similar remote/peripheral device.

With respect to claim 33, Sampath et al disclose a method of claim 1, wherein the transmitting comprises transmitting responsive to the determining (feedback diagnostic data is acquired from the monitored device (peripheral), col. 5, lines 61-62 and any other additional related device status information, col. 6, lines 10-13). The diagnostic system and method may be incorporated into the software or hardware (*processing circuitry*) of a workstation (col. 13, lines 28-33). Examiner notes that a workstation in the art may be a hard copy output engine (printer, copier, mfp), computer, or similar remote/peripheral device.

With respect to claim 34, Sampath et al disclose a method of claim 1, wherein the transmitting comprises transmitting using the peripheral device and in the absence of communications received by the peripheral device from a device external of the peripheral device (during the course of operation, and in conjunction with the controller 220 and the memory 210, the status information circuit 250 generates status information pertaining to the operational state of the one or more monitored electronic systems 200. For example, this status information can be as simple as an on/off status of the electronic system to highly specialized data, which could, for example, pertain to itemization of one or more components within the system which have actually failed. Examiner notes that the system can detect system failures such as an absence of communication and diagnose such failures. Further, the diagnostic system and method

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may be incorporated into the software or hardware (*processing circuitry*) of a workstation (col. 13, lines 28-33). Examiner notes that a workstation in the art may be a hard copy output engine (printer, copier, mfp), computer, or similar remote/peripheral device. Sampath et al also teach that the diagnostic server can forward command and control signals back to the electronic system (col. 7, lines 4-8).

With respect to claim 35, Sampath et al disclose an article of manufacture of claim 8, wherein the computer usable medium is in communication with the processor comprising a processor of the peripheral device (the interrogation commands and control signals are representative of interrogation commands and control signals passed between one or more service engineers and the particular electronic system either directly or via a processor located on the electronic system, col. 9, lines 30-34).

With respect to claim 36, Sampath et al disclose a computer implemented control system of claim 2 wherein the processing circuitry comprises processing circuitry of the hard copy output engine the interrogation commands and control signals are representative of interrogation commands and control signals passed between one or more service engineers and the particular electronic system either directly or via a processor located on the electronic system (the interrogation commands and control signals are representative of interrogation commands and control signals passed between one or more service engineers and the particular electronic system either directly or via a processor located on the electronic system, col. 9, lines 30-34). Examiner notes that the system also monitors printers (hard copy output engines) and it is inherent that the processor of the printer sends back diagnostic data.

With respect to claim 37, Sampath et al disclose a computer implemented control system of claim 15, wherein the memory and the processing circuitry comprise memory and processing circuitry of the hard copy output engine (see memory 210, and processing circuit 250 of Fig. 1).

With respect to claim 38, Sampath et al disclose a computer instruction signal of claim 21, wherein the processor comprises a processor of the peripheral device (the interrogation commands and control signals are passed between one or more service engineers and the particular electronic system either directly or via a processor located on the electronic system, col. 9, lines 30-34).

With respect to claim 39, Sampath et al disclose a method of claim 1, wherein the unique device identifier uniquely identifies the peripheral device (the combining of (1) identification/instructions, (2) machine identification, and (3) repair identification to be forwarded to the customer site (col. 10, lines 47-52)).

With respect to claim 40, Sampath et al disclose a method of claim 28, wherein the peripheral device comprises a hard copy output engine (the combining of (1) identification/instructions, (2) machine identification, and (3) repair identification to be forwarded to the customer site (col. 10, lines 47-52). The peripheral device may be a printer, col. 6, lines 22-24).

With respect to claim 41, Sampath et al disclose a method of claim 29, wherein the peripheral device comprises a hard copy output engine (the combining of (1) identification/instructions, (2) machine identification, and (3) repair identification to be

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forwarded to the customer site (col. 10, lines 47-52). The peripheral device may be a printer, col. 6, lines 22-24).

With respect to claim 42, Sampath et al disclose a computer implemented control system of claim 15, wherein the unique device identifier uniquely identifies the hard copy output engine (the combining of (1) identification/instructions, (2) machine identification, and (3) repair identification to be forwarded to the customer site (col. 10, lines 47-52). The peripheral device may be a printer, col. 6, lines 22-24).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2, 9, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sampath et al in view of Hitachi Koko Imaging Solutions, Inc. (HiKIS) (see Proquest article #3236094 by Office World News, Oct 2000).

With respect to claim 2, Sampath et al disclose a method of claim 1, wherein determining comprises

determining that a quantity of a consumable has fallen below a predetermined threshold (e.g., if printer data corresponds to a status of a threshold, this prediction information can be used to help avert a particular failure in the electronic system, col. 6, lines 22-26) and wherein transmitting comprises transmitting the electronic message

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across a firewall (the method may account for transmission through firewalls, col. 2, lines 27-33). Sampath et al do not disclose transmitting from an embedded web server contained in the peripheral device.

HiKIS discloses an embedded website in a copier capable of interacting with remote diagnostics and linking to customer sites for necessary supplies.

Sampath et al and HiKIS are analogous art because they are from the similar problem solving area of remote diagnostics. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the embedded web server feature of HiKIS to Sampath et al in order to obtain a web-enabled peripheral capable of communicating with the internet. The motivation for doing so would be to transmit a request for a replacement of a consumable to a web service.

Claim 9, an article of manufacture claim, is rejected for the same reasoning as that of claim 2.

Claim 16, computer implemented control system, is rejected for the same reasoning as that of claim 2.

Claim 22, computer signal claim, is rejected for the same reasoning as that of claim 2.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is (571) 272-7464. The examiner can normally be reached on 7-3:30pm.



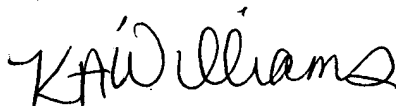
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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KIMBERLY WILLIAMS  
SUPERVISORY PATENT EXAMINER